

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

April 27, 2012

Joel Kristal 4916 Bel Pre Road Rockville, MD. 20853

Re: Freedom of Information Act Request HQ-FOI-00572-12

Dear Mr. Kristal:

In response to your Freedom of Information Act request of January 12, 2012 for a copy of e-mail between EPA officials Stuart Walker or Robin Anderson with any Japanese citizen or official regarding the clean-up of the Fukushima nuclear accident, and any responses to such email messages, enclosed are copies of the emails that are responsive to your inquiry. I have redacted several sentences referring to the medical status of an employee pursuant to 5 U.S.C. 552(b)(6).

You may appeal this response to the National Freedom of Information Officer, U.S. EPA, FOIA and Privacy Branch, 1200 Pennsylvania Avenue, N.W. (2822T), Washington, DC 20460 (U.S. Postal Service Only), FAX: (202) 566-2147, E-mail: <a href="https://hq.foia@epa.gov">hq.foia@epa.gov</a>. Only items mailed through the United States Postal Service may be delivered to 1200 Pennsylvania Avenue, NW. If you are submitting your appeal via hand delivery, courier service or overnight delivery, you must address your correspondence to 1301 Constitution Avenue, N.W., Room 6416J, Washington, DC 20001. Your appeal must be made in writing, and it must be submitted no later than 30 calendar days from the date of this letter. The agency will not consider appeals received after the 30 calendar day limit. The appeal letter should include the request number listed above. For quickest possible handling, the appeal letter and its envelope should be marked "Freedom of Information Act Appeal."

We hope that you find this information useful. If you have any questions, please contact me at 703-603-8748 or walker.stuart@epa.gov.

Sincerely,

Stuate Wilher
Stuart Walker

Staff, Science and Policy Branch

Office of Superfund Remediation and Technology

Innovation

Enclosure



#### Fw: EPA support for Japan cleanup activities

Stuart Walker to: John Cardarelli

12/22/2011 06:44 PM

Takashi\_Ohmura, "Miller, Jeffrey A", robertsDC, Dana Tulis, Erica Cc: Canzler, steve.schneider, mimi\_kuroda, keiko\_kuroda, Elizabeth

Southerland Bcc: Helen Dawson

From: Stuart Walker/DC/USEPA/US

To: John Cardarelli/CI/USEPA/US@EPA

Cc: Takashi\_Ohmura@env.go.jp, "Miller, Jeffrey A" <MillerJA6@state.gov>, robertsDC@state.gov,

Dana Tulis/DC/USEPA/US@EPA, Erica Canzler/DC/USEPA/US@EPA,

steve.schneider@em.doe.gov, mimi\_kuroda@env.go.jp, keiko\_kuroda@env.go.jp, Elizabeth

Bcc: Helen Dawson/DC/USEPA/US@EPA

Hi John.

I am glad that you had a successful trip.

As you know, there is a lot of existing guidance and tools that are used by the Superfund remedial program for the long-term cleanup of radioactively contaminated sites. This information is already on the internet, (some of documents cannot be turned into pdf files). Since it is important for the Japanese and other interested stakeholders to have accurate, up-to-date information on this complicated subject, I am sending you an email with links to relevant information so that you can more easily share that information with them. Since our office has been the primary author of these documents, we look forward to being involved in any substantive discussions and workshops dealing with this area to make sure there is no confusion or misunderstanding about the way the remedial process works. Avoiding confusion and misunderstandings is important for a number of reasons, including the fact that the cleanup of many rad (DOE and NRC) sites are governed by Federal Facilities Agreements under CERCLA section 120. Consequently, FFEO in OECA, as well as FFRO, may want to be involved in any future discussions and workshops involving rad contamination, as well.

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#### 2. Volume Reduction methods

There are a couple of documents of interest that we helped fund EPA's Office of Radiation and Indoor Air to develop. Ron Wilhelm would be the best to discuss these documents

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We have not kept such statistics. Part of the rationale for developing the three documents just mentioned that discuss remediation technologies was to get information out to staff in the field on how well various technologies had worked at previous sites. We generally consider such information more useful for those in the field when they making decisions on how to conduct future cleanups.

Please keep us informed about your next steps in providing support so that we can participate in discussions and sharing of information with the Japanese and other interested stakeholders. Please let the Japanese contacts know that they should contact me at 703-603-8748 or at walker.stuart@epa.gov for addition information on the Superfund remedial program for long-term cleanup of radioactively contaminated sites.

Thank you.

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John Cardarelli/CI/USEPA/US

To:

Takashi\_Ohmura@env.go.jp

Cc:

"Miller, Jeffrey A" <MillerJA6@state.gov>, robertsDC@state.gov, Dana

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mimi\_kuroda@env.go.jp, keiko\_kuroda@env.go.jp

Date:

12/20/2011 08:22 AM

Subject:

EPA support for Japan cleanup activities

Dear Mr. Ohmura,

I would like to thank you and Ms. Kuroda for taking time from your busy schedules to meet with me last Thursday and discuss collaborative opportunities with the United States Environmental Protection Agency (US EPA). As we discussed, the US EPA is the federal authority for all off-site remediation work in the United States. With your new law coming into effect, our respective agencies have the same mission - to protect the environment and human health. We are committed to providing you and your agency our support on a variety of challenging tasks associated with long-term cleanup issues in radiologically contaminated environments. From our meeting, I understand you have an immediate interest in obtaining information for the following areas:

- 1. Radiation Risk Communication materials
- 2. Volume reduction methods
- 3. Temporary storage siting criteria and related issues, and
- 4. Statistics on the use of decontamination technologies by land use types.

In an effort to meet your request, we have created a website (www.epaosc.net/japan) where you can access documents, reference materials, and related information that may be helpful to your needs. We will be uploading documents specific to items 1, 2, and 3 within the next few days. I will keep you posted on new updates to this site on a weekly basis as we build this site to meet your needs. If you click on CONTACTS, you will see a long list of subject matter experts who are ready and willing to support as requested. This list continues to grow as word spreads throughout our 19,000 employees which will increase your ability to tap into a large variety of environmental expertise (decontamination, remediation, water, communications, research and development, risk assessments, and many others).

I have been in contact with Steve Schneider, DOE, who I understand is working with Ms. Mimi Nameki of your staff on a "Cleanup Workshop" to be held near Hanford, Washington in February 2012. We are looking forward to contributing to that workshop through a collaborative exchange and bringing the best decontamination expertise the United States has to offer to your service.

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Finally, we have documents of a more sensitive nature that cannot be readily distributed to the public, but may be interest to your organization. To access these documents, you and others will need to create an EPA account where you will be granted access to these documents. Details on creating an account will be providing in another email.

Our agency stands ready to support your efforts in this most challenging time of implementing your new legislation and initiating cleanup activities throughout Japan. I look forward to seeing you again, perhaps in February.

Best Regards,

John Cardarelli II, PhD, CHP, CIH, PE CAPT USPHS Health Physicist Environmental Protection Agency National Decontamination Team 4900 Olympic Blvd Erlanger, KY 41018 (513) 487-2423 w (513) 675-4745 c cardarelli.john@epa.gov ASPECT GEM: www.epaosc.net/aspectgem



Fw: EPA support for Japan cleanup activities

Stuart Walker to: Monica McEaddy, Timothy Mott, Melanie Garvey, Joyce Olin, Charles Openchowski

12/22/2011 07:04 PM

Cc: Dennis Faulk, Robert Pope, Rick Robinson, Betsy Donovan

From:

Stuart Walker/DC/USEPA/US

To:

Monica McEaddy/DC/USEPA/US@EPA, Timothy Mott/DC/USEPA/US@EPA, Melanie

Garvey/DC/USEPA/US@EPA, Joyce Olin/DC/USEPA/US@EPA, Charles

Openchowski/DC/USEPA/US@EPA

Cc:

Dennis Faulk/R10/USEPA/US@EPA, Robert Pope/R4/USEPA/US@EPA, Rick

Robinson/R2/USEPA/US@EPA, Betsy Donovan/R2/USEPA/US@EPA

## Please note the upcoming DOE workshop with the Japanese on rad site cleanup approaches ---- Forwarded by Stuart Walker/DC/USEPA/US on 12/22/2011 07:01 PM -----

From:

Stuart Walker/DC/USEPA/US

To:

John Cardarelli/CI/USEPA/US@EPA

Cc:

Takashi\_Ohmura@env.go.jp, "Miller, Jeffrey A" <MillerJA6@state.gov>, robertsDC@state.gov,

Dana Tulis/DC/USEPA/US@EPA, Erica Canzler/DC/USEPA/US@EPA,

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Thank you.

---- Forwarded by Stuart Walker/DC/USEPA/US on 12/21/2011 09:07 PM -----

From:

John Cardarelli/CI/USEPA/US

To:

Takashi\_Ohmura@env.go.jp

Cc:

"Miller, Jeffrey A" <MillerJA6@state.gov>, robertsDC@state.gov, Dana

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Date:

12/20/2011 08:22 AM

Subject: EPA support for Japan cleanup activities

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CAPT USPHS
Health Physicist
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4900 Olympic Blvd
Erlanger, KY 41018
(513) 487-2423 w
(513) 675-4745 c
cardarelli.john@epa.gov
ASPECT GEM: www.epaosc.net/aspectgem



Re: RES: EPA support for Japan cleanup activities 🗎

Stuart Walker to: H.Monken-Fernandes

12/26/2011 10:33 PM

From:

Stuart Walker/DC/USEPA/US

To:

<H.Monken-Fernandes@iaea.org>

Hi Horst.

I am out on vacation this week but still checking email sporadically. I would be happy to talk with you about your Japanese meeting this week or next when I get back in the office.

By unnecessary decontamination do you mean the Japanese want to cleanup the occupied and unoccupied lands to the same levels? I had seen some articles where it seems they were trying to decon forests, which I would have thought would be pretty far down the list of worries.

#### Stuart

Hi Stuart Thanks for sharing the email. The IAE...

12/26/2011 07:53:23 PM

From:

<H.Monken-Fernandes@iaea.org> Stuart Walker/DC/USEPA/US@EPA

To: Date:

12/26/2011 07:53 PM

Subject:

RES: EPA support for Japan cleanup activities

Hi Stuart Thanks for sharing the email. The IAEA supported the participation of John's in Global 2011. It seems that it was a fruitful participation. I understand their needs but what seems to be out of their mind is the decision making process itself especially the cost x benefit (optmization) analysis. They are driven by the idea of decontaminating (cleaning-up) even if it is not really necessary. In the scope of Environet I am trying to organise a meeting in Japan on this topic. Perhaps we can discuss it. Send please my warmest wishes

De: Walker.Stuart@epamail.epa.gov [Walker.Stuart@epamail.epa.gov] Enviado: sexta-feira, 23 de dezembro de 2011 1:15 Para: MONKEN FERNANDES, Horst Richard S. Assunto: Fw: EPA support for Japan cleanup activities

Hi Horst.

I had heard that you were involved with last weeks Global 2011 conference in Japan. I thought you might find the email below interesting.

Will you be in Phoenix at the WM symposium?

Have a happy holiday.

#### Stuart

---- Forwarded by Stuart Walker/DC/USEPA/US on 12/22/2011 07:06 PM

From: Stuart Walker/DC/USEPA/US

To: John Cardarelli/CI/USEPA/US@EPA

Cc: Takashi\_Ohmura@env.go.jp, "Miller, Jeffrey A"

<MillerJA6@state.gov>, robertsDC@state.gov, Dana
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Best Regards,

John Cardarelli II, PhD, CHP, CIH, PE CAPT USPHS
Health Physicist
Environmental Protection Agency
National Decontamination Team
4900 Olympic Blvd
Erlanger, KY 41018
(513) 487-2423 w
(513) 675-4745 c
cardarelli.john@epa.gov
ASPECT GEM: www.epaosc.net/aspectgem

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Fw: EPA support for Japan cleanup activities

Stuart Walker to: Horst Monken-Fernandes

12/22/2011 07:15 PM

From:

Stuart Walker/DC/USEPA/US

To:

Horst Monken-Fernandes < H.Monken.Fernandes@iaea.org>

Hi Horst,

I had heard that you were involved with last weeks Global 2011 conference in Japan. I thought you might find the email below interesting.

Will you be in Phoenix at the WM symposium?

Have a happy holiday.

#### Stuart

---- Forwarded by Stuart Walker/DC/USEPA/US on 12/22/2011 07:06 PM -----

From:

Stuart Walker/DC/USEPA/US

To:

John Cardarelli/CI/USEPA/US@EPA

Cc:

Takashi\_Ohmura@env.go.jp, "Miller, Jeffrey A" <MillerJA6@state.gov>, robertsDC@state.gov,

Dana Tulis/DC/USEPA/US@EPA, Erica Canzler/DC/USEPA/US@EPA,

steve.schneider@em.doe.gov, mimi kuroda@env.go.jp, keiko kuroda@env.go.jp, Elizabeth

Southerland/DC/USEPA/US@EPA

Date:

12/22/2011 06:44 PM

Subject:

Fw: EPA support for Japan cleanup activities

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Thank you.

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From:

John Cardarelli/CI/USEPA/US

To:

Takashi Ohmura@env.go.jp

Cc:

"Miller, Jeffrey A" <MillerJA6@state.gov>, robertsDC@state.gov, Dana Tulis/DC/USEPA/US@EPA, Erica Canzler/DC/USEPA/US@EPA, steve.schneider@em.doe.gov,

mimi\_kuroda@env.go.jp, keiko\_kuroda@env.go.jp

Date:

12/20/2011 08:22 AM

Subject:

EPA support for Japan cleanup activities

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Fw: EPA support for Japan cleanup activities

Stuart Walker to: RobinM Anderson

12/22/2011 07:34 PM

From:

Stuart Walker/DC/USEPA/US

To:

RobinM Anderson/DC/USEPA/US@EPA

---- Forwarded by Stuart Walker/DC/USEPA/US on 12/22/2011 07:33 PM ----

From:

Robert Pope/R4/USEPA/US

To:

Stuart Walker/DC/USEPA/US@EPA, Monica McEaddy/DC/USEPA/US@EPA, Timothy

Mott/DC/USEPA/US@EPA, Melanie Garvey/DC/USEPA/US@EPA, Joyce Olin/DC/USEPA/US@EPA, Charles Openchowski/DC/USEPA/US@EPA

Cc:

Dennis Faulk/R10/USEPA/US@EPA, Rick Robinson/R2/USEPA/US@EPA, Betsy

Donovan/R2/USEPA/US@EPA

Date:

12/22/2011 07:30 PM

Subject:

Re: EPA support for Japan cleanup activities

#### Hi Stuart.

John has initially contacted me about having the Japanese come to SRS, but I have not heard a follow up from DOE,yet. I'll try to keep you in the loop if I hear more.

Happy Holidays,

Rob

Stuart Walker

---- Original Message ---From: Stuart Walker

Sent: 12/22/2011 07:04 PM EST

To: Monica McEaddy; Timothy Mott; Melanie Garvey; Joyce Olin; Charles Openchowski

Cc: Dennis Faulk; Robert Pope; Rick Robinson; Betsy Donovan

Subject: Fw: EPA support for Japan cleanup activities

Please note the upcoming DOE workshop with the Japanese on rad site cleanup approaches ----- Forwarded by Stuart Walker/DC/USEPA/US on 12/22/2011 07:01 PM -----

From:

Stuart Walker/DC/USEPA/US

To:

John Cardarelli/CI/USEPA/US@EPA

Cc:

Takashi\_Ohmura@env.go.jp, "Miller, Jeffrey A" <MillerJA6@state.gov>, robertsDC@state.gov,

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From:

John Cardarelli/CI/USEPA/US Takashi Ohmura@env.go.ip

To: Cc:

"Miller, Jeffrey A" <MillerJA6@state.gov>, robertsDC@state.gov, Dana

Tulis/DC/USEPA/US@EPA, Erica Canzler/DC/USEPA/US@EPA, steve.schneider@em.doe.gov,

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Date:

12/20/2011 08:22 AM

Subject:

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Cc:

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mimi kuroda@env.go.jp, keiko kuroda@env.go.jp

Date: 12/20/2011 08:22 AM

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Fw: EPA support for Japan cleanup activities

Stuart Walker to: Yolanda Sanchez

Cc: John Cardarelli, Colleen Petullo, Peter Oh

From:

Stuart Walker/DC/USEPA/US

To:

Yolanda Sanchez/DC/USEPA/US@EPA

Cc:

John Cardarelli/CI/USEPA/US@EPA, Colleen Petullo/LV/USEPA/US@EPA, Peter

12/29/2011 05:23 PM

Oh/DC/USEPA/US@EPA

#### Hi Yolanda,

I saw your email, I did include the video in an earlier email to John and the Japanese, along with the common radionuclides fact sheets. Those are the only two tools for the general public that the remedial program has that are specifically focused on radiation site cleanups.

---- Forwarded by Stuart Walker/DC/USEPA/US on 12/29/2011 05:17 PM -----

From:

Stuart Walker/DC/USEPA/US

To:

John Cardarelli/CI/USEPA/US@EPA

Cc:

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Southerland/DC/USEPA/US@EPA

Date:

12/22/2011 06:44 PM

Subject:

Fw: EPA support for Japan cleanup activities

Hi John,

I am glad that you had a successful trip.

As you know, there is a lot of existing guidance and tools that are used by the Superfund remedial program for the long-term cleanup of radioactively contaminated sites. This information is already on the internet, (some of documents cannot be turned into pdf files). Since it is important for the Japanese and other interested stakeholders to have accurate, up-to-date information on this complicated subject, I am sending you an email with links to relevant information so that you can more easily share that information with them. Since our office has been the primary author of these documents, we look forward to being involved in any substantive discussions and workshops dealing with this area to make sure there is no confusion or misunderstanding about the way the remedial process works. Avoiding confusion and misunderstandings is important for a number of reasons, including the fact that the cleanup of many rad (DOE and NRC) sites are governed by Federal Facilities Agreements under CERCLA section 120. Consequently, FFEO in OECA, as well as FFRO, may want to be involved in any future discussions and workshops involving rad contamination, as well.

Here is the website where all of the guidance and tools are contained for the Superfund remedial program that are relevant to the cleanup of radioactively contaminated sites. Most of these guidance and tools are focused on how EPA selects protective cleanup levels.

http://www.epa.gov/superfund/health/contaminants/radiation/index.htm

If it would be helpful for the Japanese to have an overview of the Superfund remedial program policies on radioactively contaminated sites, here is our standard international talk given at an IAEA meeting http://www-ns.iaea.org/downloads/rw/projects/rsls/2010/usa1.pdf

There is also an online course on how the Superfund remedial program selects cleanup levels for the long-term cleanup of radioactively contaminated sites http://www.clu-in.org/conf/itrc/radscleanup\_060507/

#### 1.Radiation Risk Communication materials

We have two tools specifically for discussing radiation risk communication issues with the public at Superfund remedial sites. They may be found on this website: http://www.epa.gov/superfund/health/contaminants/radiation/radcomm.htm

We have a booklet which provides information to help the general public understand more about the common radionuclides that are found at Superfund sites across the nation. http://www.epa.gov/superfund/health/contaminants/radiation/pdfs/nuclides.pdf

This booklet includes a 2 page fact sheet on Cesium-137 http://www.epa.gov/superfund/health/contaminants/radiation/pdfs/cesium.pdf

There is also a 19 minute video on how we conduct our risk assessment process at radioactively contaminated sites that can be viewed online http://www.epa.gov/superfund/health/contaminants/radiation/radvideo.htm

#### 2. Volume Reduction methods

There are a couple of documents of interest that we helped fund EPA's Office of Radiation and Indoor Air to develop. Ron Wilhelm would be the best to discuss these documents

The Technology Reference Guide for Radioactively Contaminated Media chapters 2.3 and 2.4 focus on chemical and physical separation technologies that may be used with radioactively contaminated soil http://www.epa.gov/superfund/health/contaminants/radiation/pdfs/technology\_ref\_guide\_for\_contaminated \_media.pdf

The Technology Reference Guide for Radioactively Contaminated Media also has a summary chart in Appendix E on the suitability of various technologies in an urban environment <a href="http://www.epa.gov/radiation/docs/cleanup/402-r-06-003.pdf">http://www.epa.gov/radiation/docs/cleanup/402-r-06-003.pdf</a>

## 3. Temporary storage siting criteria and related issues

The ITRC group, which is led by U.S. state government environmental officials who are focused on the cleanup of DOE and DOD sites published a guidance on Decontamination and Decommissioning of Radiologically Contaminated Facilities that includes further information on remediation technologies (see chapter 6), information on waste management including storage issues (see chapter 5.5), and ways to work with the general public during site cleanup (see chapter 9). Chapter 8 has a nice case study summary for 10 different sites. Our office worked closely with ITRC on this guidance. In addition to myself, Robert Storms of the state of Tennessee and Carl Spreng of the state of Colorado are the best contacts for this guidance.

http://www.itrcweb.org/Documents/RAD5.pdf

ITRC also has an online training course on Decontamination and Decommissioning of Radiologically Contaminated Facilities. An archived version of this short course can be taken online, which will include the presentations and questions and answers for a previous live session. http://www.clu-in.org/conf/itrc/radsdd 040308/

## Statistics on the use of decontamination technologies by land use types.

We have not kept such statistics. Part of the rationale for developing the three documents just mentioned that discuss remediation technologies was to get information out to staff in the field on how well various technologies had worked at previous sites. We generally consider such information more useful for those in the field when they making decisions on how to conduct future cleanups.

Please keep us informed about your next steps in providing support so that we can participate in discussions and sharing of information with the Japanese and other interested stakeholders. Please let the Japanese contacts know that they should contact me at 703-603-8748 or at walker.stuart@epa.gov for addition information on the Superfund remedial program for long-term cleanup of radioactively contaminated sites.

Thank you.

---- Forwarded by Stuart Walker/DC/USEPA/US on 12/21/2011 09:07 PM -----

From:

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Date:

12/20/2011 08:22 AM

Subject:

EPA support for Japan cleanup activities

Dear Mr. Ohmura,

I would like to thank you and Ms. Kuroda for taking time from your busy schedules to meet with me last Thursday and discuss collaborative opportunities with the United States Environmental Protection Agency (US EPA). As we discussed, the US EPA is the federal authority for all off-site remediation work in the United States. With your new law coming into effect, our respective agencies have the same mission - to protect the environment and human health. We are committed to providing you and your agency our support on a variety of challenging tasks associated with long-term cleanup issues in radiologically contaminated environments. From our meeting, I understand you have an immediate interest in obtaining information for the following areas:

- 1. Radiation Risk Communication materials
- 2. Volume reduction methods
- 3. Temporary storage siting criteria and related issues, and
- 4. Statistics on the use of decontamination technologies by land use types.

In an effort to meet your request, we have created a website (www.epaosc.net/japan) where you can access documents, reference materials, and related information that may be helpful to your needs. We will be uploading documents specific to items 1, 2, and 3 within the next few days. I will keep you posted on new updates to this site on a weekly basis as we build this site to meet your needs. If you click on CONTACTS, you will see a long list of subject matter experts who are ready and willing to support as requested. This list continues to grow as word spreads throughout our 19,000 employees which will increase your ability to tap into a large variety of environmental expertise (decontamination, remediation, water, communications, research and development, risk assessments, and many others).

I have been in contact with Steve Schneider, DOE, who I understand is working with Ms. Mimi Nameki of your staff on a "Cleanup Workshop" to be held near Hanford, Washington in February 2012. We are looking forward to contributing to that workshop through a collaborative exchange and bringing the best decontamination expertise the United States has to offer to your service.

We are also arranging to send you hard copy examples of our public information materials on radiation risk communication and related issues. You may be contacted by my EPA colleagues in the near future to follow-up with any additional assistance.

Finally, we have documents of a more sensitive nature that cannot be readily distributed to the public, but may be interest to your organization. To access these documents, you and others will need to create an EPA account where you will be granted access to these documents. Details on creating an account will be providing in another email.

Our agency stands ready to support your efforts in this most challenging time of implementing your new legislation and initiating cleanup activities throughout Japan. I look forward to seeing you again, perhaps in February.

Best Regards,

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